Federation of Earth Science Information Partners
MAKING DATA MATTER

Federation of Earth Science Information Partners
Partnership Application

Please complete all sections to the fullest extent possible and forward completed application to: Carol Meyer, carol.meyer@earthsciencefoundation.org. If you have any questions, please contact her at 877.870.3747.

I. CONTACT INFORMATION

A. Primary Contact/Principal Investigator

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B. Designated Assembly Representative (could be same as above)

Name: same as above
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C. Other Contacts

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II. ABOUT YOUR ORGANIZATION

A. ORGANIZATION/DIVISION/PROJECT NAME:
Global Systems Science project, Lawrence Hall of Science, University of California
Integrated High School Science Course

B. OVERVIEW OF YOUR PRIMARY ACTIVITIES (250 words or less)

Global Systems Science **(GSS)** is an integrated science program for the first year of high school on the topic of global environmental change. The course emphasizes how scientists from a wide variety of fields work together to understand problems of global impact. The "big ideas" of science are stressed, such as the concept of an interacting system, the co-evolution of the atmosphere and life, the goal of a sustainable world, and the important role that individuals play in both impacting and protecting our global environment.

C. Please list and briefly describe the primary product(s) or service(s) that your organization provides (will provide) to the community.

The instructional materials for *Global Systems Science* consists of a Teacher's Guide and nine Student Books, each of which focuses on a different aspect of global environmental change. Each Guide contains laboratory experiments, home investigations, descriptions of recent scientific work, historical background, and consideration of the economic, political, and ethical issues associated with each of the environmental issues. The Books are:

A New World View
Climate Change
Life and Climate
Ozone
Losing Biodiversity
Energy Flow
Ecosystem Change
Population Growth
Energy Use

The books are in detail at the website below:

D. Please give a main website address for the proposed Partnership:

Web Address: http://lhs.Berkeley.edu/gss

III. HOW YOUR ORGANIZATION WILL BENEFIT FROM/CONTRIBUTE TO THE EARTH SCIENCE INFORMATION PARTNERS (ESIP) FEDERATION

A. Describe current or anticipated users of your products and services and how you think the Federation can help you better serve this population. (200 words or less)

Audience for GSS is mostly high schools — teachers and students, though some middle school teachers have used the materials as well. To the extent that teachers and students connect with the Federation and explore its partners, the Federation would help GSS reach that target population. We can also participate in Federation functions such as booths and presentations at conferences, which would also help us reach our target audience. Finally, a critically important benefit would be connection with ESIP scientists that would (a) inform and contribute to keeping GSS materials up to date and make those scientists aware of the existence of the GSS products.

B. Describe any Earth science technologies that you have developed and are willing to bring to the Federation's efforts to provide best-practices. (200 words or less)

Part of the GSS materials is a suite of software programs called Interpreting Digital Images. It consists of 13 software programs and related six activities that help people learn the concepts and skills needed to interpret satellite images. The software works on both Mac and PC computers.

C. Describe how your proposed membership would contribute to the efforts and the mission of one or more standing committees, working groups and/or clusters. See Page 3 for descriptions of the different activities of the various standing committees, working groups, and clusters. (200 words or less)

GSS would be a great benefit to the Education Committee. Seeing as how I've already served as chair of that committee and participated in numerous committee meetings, the contributions of GSS to the Education Committee has already been demonstrated.

D. Describe your own use of Earth science information and data and how you would see this use enhanced by your partnership in the Federation. (200 words or less)

One of the goals of GSS is to connect high school classes with current and active data sets that can be used to analyze various aspects of the state of the Earth, such as vegetation, ecological health, atmospheric parameters, CO2 monitoring, ozone, agriculture, population, demographics, and ocean data. The ESIP organizations have precisely that kind of data that could be useful in high school GSS courses.

IV. YOUR CHOICE OF MEMBERSHIP TYPE. PLEASE PICK ONE.

ESIP-I (primarily a data archive center)	
ESIP-II (primarily a research center)	
ESIP-III (primarily applications and education)	X
ESIP-IV (primarily a sponsoring member)	

V. Any other comments about your proposed membership and its relation to the Federation that you wish to provide.

I'm aware of development of new ESIP portal systems and am most interested in how those systems evolve. It's not a trivial matter to make scientific datasets available for use by non-specialized users, but development of user friendly systems could be of great benefit even to the specialized scientists users as well.

Thank you for your application for partnership in the ESIP Federation.

List of Federation Committees and Clusters

Administrative Committees

Executive Committee: Comprised of all standing and administrative committee chairs, ESIP Type Representatives, the President and Vice President of the Federation. Oversight body for most day-to-day activities of the Federation, acts on behalf of the Assembly between meetings.

Constitution and Bylaws: Provides counsel on matters related to the constitution and bylaws and other related issues (e.g. amendments to government documents)

Finance and Appropriations: Oversees financial resources of the Federation, including the annual budgeting process.

Partnership: Reviews and processes all applications for membership before making applications available for review by members of the Federation. Deals with other membership-related issues.

Standing Committees:

Commercial Development: Promotes a forum wherein commercial development of Earth science information can be fostered.

Community Engagement: Provides a forum for the Federation to promote partner products and to engage new users for data products and services.

Education: Provides a forum to make accessible to educators and learners at all levels in both formal and informal educational contexts the Earth science data, information, tools, and curricula available within the ESIP Federation.

Information Technology and Interoperability: Provides a forum for discussing information technology and interoperability issues of the Earth science community and serves as a central point for activities in this realm.

*Products and Servic*es: Provides a forum for defining best practices and defining requirements for earth science products and services. Currently is involved in developing an inventory of partner products and services.

Clusters (presently active, April 2005):

GIS

Intelligent Systems

Air Quality